California Weather-Hydro Conditions during September 2007

At the end of Water Year 2007 (October 1, 2006 through September 30, 2007) California statewide hydrologic conditions were as follows precipitation, 65% of average to date; runoff, 50% of average to date; and reservoir storage, 80% of average for the date. On April 1, the statewide snow pack was about 40% of the April 1 average (the usual date of maximum accumulation). This is the smallest snowpack for April 1 since 1988 when the statewide snowpack was at 30 percent of the April 1 average. On May 1, 2007, the statewide snowpack was only about 25% of normal due to below-normal snowfall and above-normal temperatures during April. Usually, snowmelt continues well into June, but by June 1 of this water year, the statewide snowpack was essentially gone.

A series of troughs during September kept temperatures throughout the State below normal. During the last half of September, an unusually strong, cold, low-pressure system developed in the Gulf of Alaska and spread across California, resulting in much cooler than normal temperatures and widespread precipitation. This system brought a dusting of snow to the higher elevations of the Sierra and localized heavy showers to Southern California.

In general, seasonal precipitation during this water year has been significantly below average, especially in Southern California, where record dryness has occurred at some locations. On September 30, the Northern Sierra 8-Station Index had a seasonal total of 37.2", which is about 74% of the average for an entire Water Year (50.0"). During Water Year 2007, the Northern Sierra 8-Station Index had the sixth driest January and March on record. (In contrast, the other large precipitation months of December and February were above normal at 101% and 170% of average, respectively.) The Water Year 2007 October through September seasonal total of 37.2" is the 24th driest year out of 88 years of record. In both Northern and Southern California, fire season began early because of the dryness. The storm in September was insufficient to alleviate the abnormally dry conditions.

As of June 5, 2007, the date of the last forecast for this Water Year, the projected median April-July unimpaired snowmelt runoff for the State's major water supply basins ranged from 56% (Shasta Lake Inflow) to 22% (Tule River). Sacramento River unimpaired runoff observed through September 30, 2007 was about 10.3 million acre-feet (MAF), which is about 55% of average. (On September 30, 2006, the observed Sacramento River unimpaired runoff through that date was about 31.9 MAF or about 171% of average.) The median forecasts of the Sacramento and San Joaquin Valley Water Year Type indexes are "Dry" and "Critical," respectively.

Selected Cities Precipitation Accumulation as of 10/01/2007 (National Weather Service Water Year: July through June)

	Jul 1 to Date 2007 - 2008 (in inches)	% Avg	Jul 1 to Date 2006 - 2007 (in inches)	% Avg	% Avg Jul 1 to Jun 30 2007 - 2008
Eureka	1.21	89	0.13	10	3
Redding	1.31	182	0.04	6	3
Sacramento	0.07	16	0.00	0	0
San Francisco	0.16	55	0.00	0	0
Fresno	0.04	15	0.00	0	0
Bakersfield	0.13	59	0.00	0	2
Los Angeles	0.52	116	0.00	0	3
San Diego	0.05	16	0.05	16	0

Key Reservoir Storage (1,000 AF) as of 10/01/2007								
Reservoir	River	Storage	Avg Storage	% Average	Capacity	% Capacity	Flood Control Encroachment	Total Space Available
Trinity Lake	Trinity	1,463	1,704	86	2,448	60	---	985
Shasta Lake	Sacramento	1,886	2,813	67	4,552	41	-2,666	2,666
Lake Oroville	Feather	1,569	2,255	70	3,538	44	-1,794	1,969
New Bullards Bar Res	Yuba	619	592	105	966	64	-295	347
Folsom Lake	American	325	560	58	977	33	-652	652
New Melones Res	Stanislaus	1,438	1,332	108	2,420	59	-845	982
Don Pedro Res	Tuolumne	1,267	1,365	93	2,030	62	-516	763
Lake McClure	Merced	327	467	70	1,025	32	-531	698
Millerton Lake	San Joaquin	201	203	99	520	39	-320	319
Pine Flat Res	Kings	186	348	53	1,000	19	-814	814
Isabella	Kern	115	185	62	568	20	-194	453
San Luis Res	(Offstream)	631	988	64	2,039	31	---	1,408

The latest National Weather Service Climate Prediction Center (CPC) 90-Day long-range seasonal weather outlook (for October through December), issued September 20, suggests above average precipitation for Northern California (including the Pacific Northwest) and parts of Central California and average to below-average for Central and Southern California. Temperatures are expected to be above average for all of the State except the central and southern coasts, which are forecast to be average. The latest CPC long-range weather outlook for October, issued September 30, suggests below average precipitation for Southern California and average values for Central and Northern California. Temperatures are expected to be average for all of California. In addition to the below average precipitation suggested for Southern California, both the one- and three-month forecasts suggest that precipitation will be below average for the American Southwest.

The pattern of the this Winter Outlook is influenced by the continuing development of weak to moderate La Niña conditions (cooler than average sea-surface temperatures) across the tropical Pacific. Current conditions suggest that La Niña conditions may continue into the spring of 2008. La Niña events influence the position and strength of the jet stream over the Pacific Ocean, which in turn affects the winter precipitation and temperature patterns across the United States and other locations in the world.